

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT**

I. HEADING

DATE: February 11, 2002

SUBJECT: Peoples Missionary Baptist Church

FROM: Kurt Grunert, OSC, U.S. EPA, Region 5, ERB, RS1, Grosse Ile, MI

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Initial and Final POLREP

II. BACKGROUND

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| Site ID: | N/A |
| Response Authority: | CERCLA |
| NPL Status: | Not on NPL |
| State Notification: | No |
| Latitude/Longitude: | 42.21°17.36" North /83.01 ' 38.76 " West |
| Start Date: | February 7, 2002 |

III. SITE INFORMATION

A. Incident Category

CERCLA Emergency Response - Elemental Mercury Spill

B. Site Description

1. Site Location

The incident occurred at the rear of the Peoples Missionary Baptist Church at 3000 McDougall Street, located in Detroit, Wayne County, Michigan. The spill occurred at the rear of the sanctuary adjacent to an area used as a classroom. The area surrounding the site is a mixed residential and commercial area.

2. Description of Threat

During the evening of February 6, 2002 the City of Detroit Fire Department (DFD) received a phone call reporting that a mercury-containing thermometer had been broken inside of a church, in an area used as a classroom. The DFD Hazardous Materials Team responded to the site and conducted an initial cleanup. The DFD reported the spill to the National Response Center (NRC) who in-turn contacted the United States Environmental Protection Agency (U.S. EPA) Region Five Duty Officer. Mercury vapor is highly toxic when inhaled, especially for sensitive populations such as infants, children, and the elderly.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation:

A cleanup of the spill area has been performed by the church's contractor and air samples have been collected. Final laboratory results indicate that the mercury vapor concentration in the spill area is below the clean up level set by the Michigan Department of Community Health (MDCH).

2. Site activities to date:

On the evening of February 6, 2002, a mercury-containing thermostat, located at the rear of the sanctuary in a classroom area, had broken, releasing the contents of one of the three mercury switches contained in the unit. DFD Hazardous Materials Team responded to the site following a call reporting the incident. An initial cleanup was conducted and the NRC was contacted. The NRC in-turn notified the U.S. EPA region 5 Duty Officer of the incident. The Superfund Technical Assessment and Response Team (START) from Tetra Tech EM Inc. was dispatched to the site. At 1330 hours on February 7, 2002 START and U.S. EPA arrived to the site. Upon arrival, U.S. EPA met with representatives from the City of Detroit Fire Department, City Detroit Department of Health, Michigan Department of Community Health (MDCH) (via phone) and representatives from the church.

START conducted air monitoring of the church using a Lumex RA-915 mercury vapor analyzer. Results of the air monitoring indicated that mercury vapor concentrations in the sanctuary were above the level of 3,000 nanograms per cubic meter (ng.m3) set by MDCH for the incident. Readings ranged from 12,900 ng.m3 at the floor in the spill area to 800 ng/m3 in the breathing zone of the adjacent classroom. Visible beads of elemental mercury were observed on the support column (where the thermostat was secured to), on a folding room divider (adjacent to the thermostat) and in between floor tiles in the classroom area (below the thermostat). Marine Pollution Control of Detroit, Michigan (MPC) was contracted by the church to conduct a clean up of the spill area. START provided technical oversight.

Clean up activities began on February 8, 2002 which included the removal of the visible elemental mercury beads using a mercury vacuum and the removal of the thermostat. They also set up a ventilation system and began venting the room to the outdoors during the cleanup activities until the area was re-screened with a Lumex at 1300 hours.

Results of the second screening indicated that the mercury vapor concentrations in the breathing zone had been reduced to approximately 600 ng/m3 and to 4,800 (highest) on the floor in the spill area. MPC returned the following morning along with their consultant Clayton Group Services (Clayton) to conduct air samples from the spill area.

Two air samples were collected by Clayton using NIOSH Modified 6009. Samples were submitted to Clayton Group Services in Novi, Michigan. Results of the samples were 390 and 300 ng/m3, which is well below the cleanup level of 3,000 ng/m3 set by MDCH.

3. Enforcement:

No actions to report at this time.

C. Next Steps

None.

D. Key Issues

None.

V. **COST INFORMATION**

START \$900 (Estimated as of February 11, 2002)
EPA

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.